



GEORGIA DEPARTMENT
OF COMMUNITY HEALTH

The Role of Medication Fill Data in Measuring Adherence and Preventing Abuse



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DCH OIT – Health Information Technology

July 24, 2019



Mission:

The mission of the Department of Community Health is to provide access to affordable, quality health care to Georgians through effective planning, purchasing, and oversight.



Partnering for Success

The Department of Community Health and the Georgia Health Information Network (GaHIN) work closely to ensure that providers and caregivers can access patient health information at the point of care to optimize outcomes and reduce costs.

Access for Authorized Medical Providers

- Clinical Viewer allows providers without an EHR to query GaHIN network
- Configured through GAMMIS Web Portal
- One click to log in to the GaHIN network
- Access to all available patient records and reports



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GAMMIS Online User Training



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We have developed training on the simple steps needed to sign up to access GaHIN as well as how to navigate within the electronic record

- Part 1 – accepting the Terms and Conditions required prior to access
- Part 2 – primary functions and navigation within the GAMMIS Clinical Viewer

<https://truven.adobeconnect.com/gammis-training>

You must have an active, authorized GAMMIS login and accept the terms and conditions (one time) prior to gaining access to GaHIN data

Note: Your facility may block streaming content on the internet, including content streaming from the truvenhealth.com domain. In this case, you will need to contact your IT Team for information on how to access streaming content.



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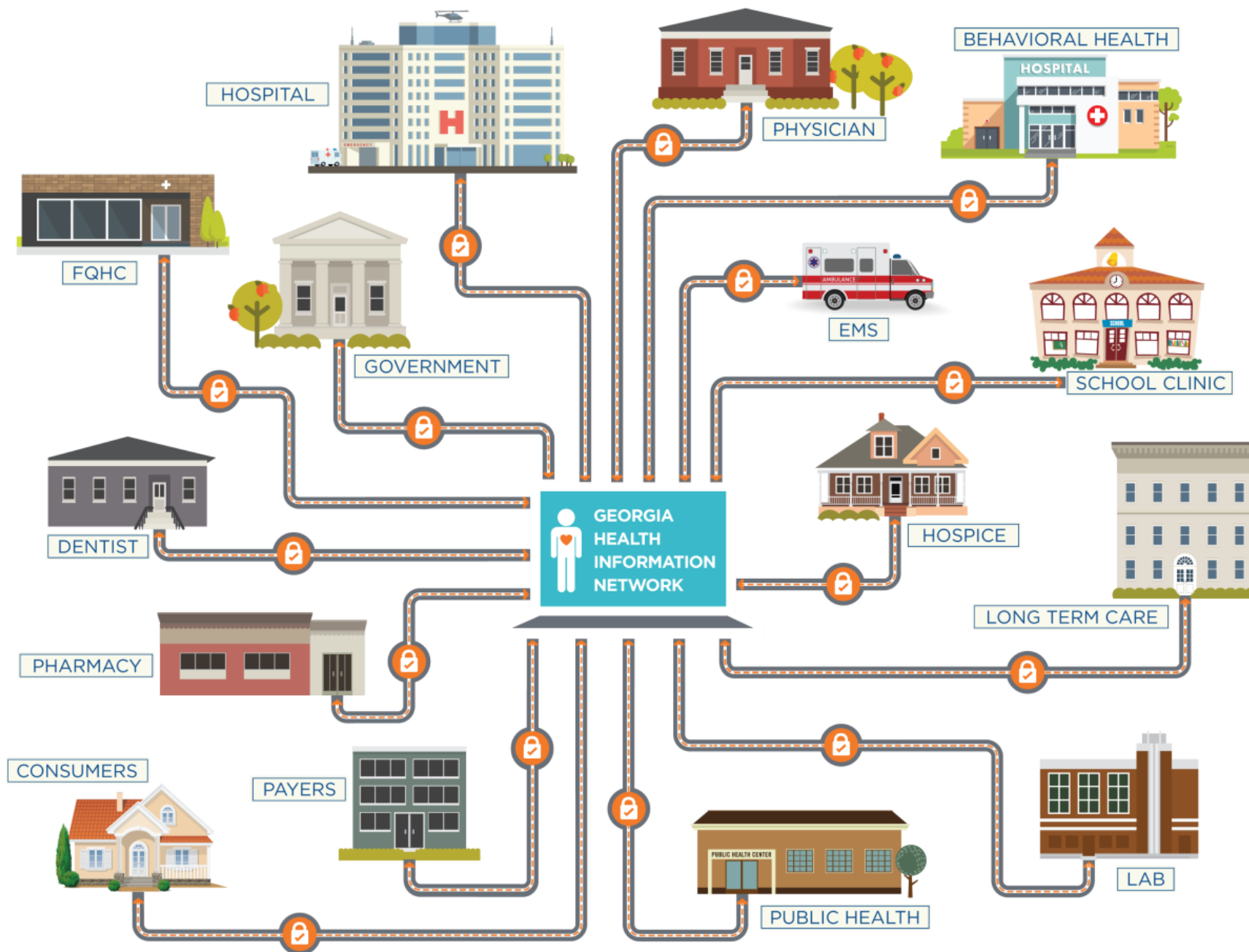
GaHIN – Georgia's Statewide Health Information Exchange

Georgia Health Information Network (GaHIN)

Dedicated to creating a healthier Georgia through the use and exchange of electronic health information

- Advance patient-centered healthcare
- Increase efficiency
- Improve the health of the state's entire population





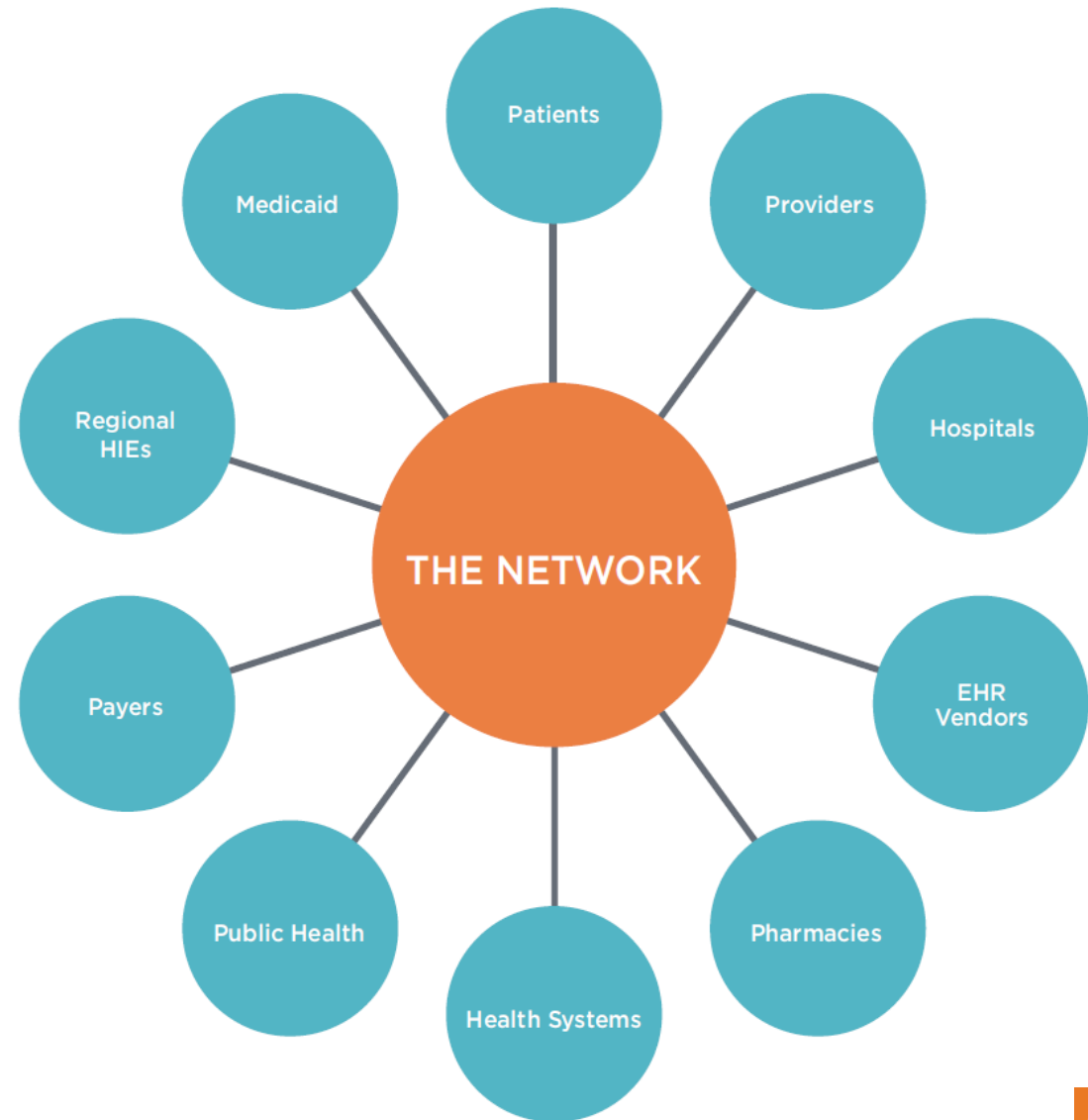
Creating a Statewide Electronic Network



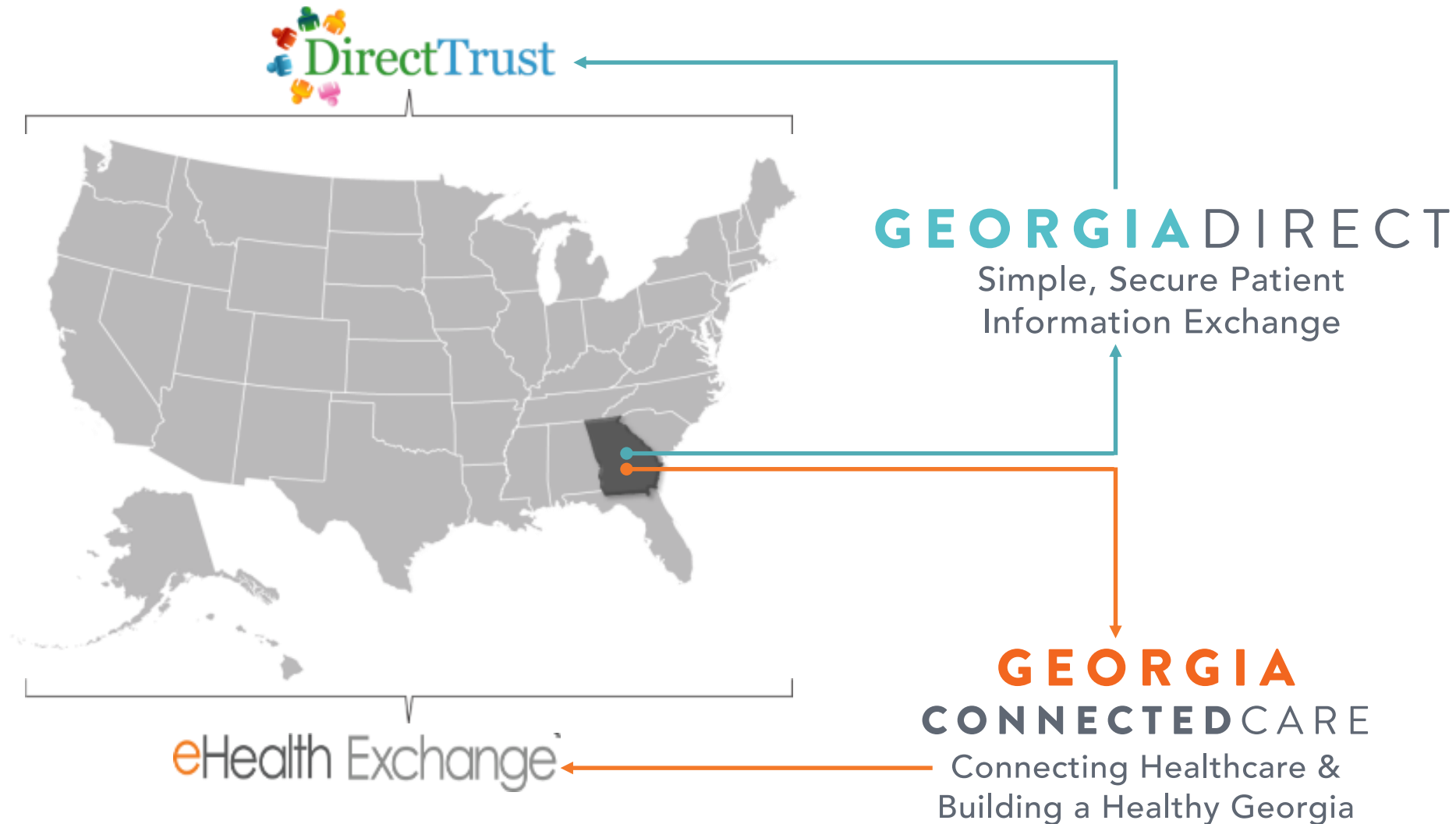
GaHIN Network Model

Federated-hybrid model, not a central repository of clinical data

- Patient information remains with the treating provider and only flows when there is authorization
- GaHIN makes an individual data repository available to Members directly connected to the Network



GaHIN Products and Services



Basic Data Exchange

Free email messaging service to securely send patient health information to other authorized healthcare professionals

2019 Totals YTD (May)

- 443,213 send & receive transactions
- 6,433 registered providers
- 341 member organizations



2018 Totals

- 747,960 send & receive transactions
- 6,321 registered providers
- 327 member organizations



Robust Integrated Patient Search (Query)

Providers can use their EHR to quickly access patient health data from hospitals, physician practices, state health systems and much more

2019 Totals YTD (May)

- ~12,950 connected providers
- 1,823,320 queries
- 33,770,934 MPI records

eHealth Exchange™

2018 Totals

- ~12,942 connected providers
- 2,388,290 queries
- 32,273,127 MPI records



Connected Organizations

State Agencies

- GA Medicaid/Department of Community Health (DCH)
- GA Department of Public Health (DPH)
- GA Division of Families and Children Services (DFCS)
- GA Department of Juvenile Justice (DJJ)
- GA Department of Behavioral Health and Developmental Disabilities (DBHDD)

Health Systems/Hospitals

- Children's Healthcare of Atlanta (Epic)
- Emory Healthcare (Cerner)
- Grady Health System (Epic)
- Gwinnett Health System (RelayHealth)
- WellStar Health System (Epic)

Regional HIEs

- Georgia Health Connect (GaHC) (Liaison)
- GRACHIE/Chatham HealthLink (Cerner)
- HealtheConnection (Cerner)
- HealthIE Georgia (Azalea)

Care Management Organizations

- Amerigroup (with IHE)
- CareSource
- Peach State
- WellCare

Specialty Connections

- Atlanta Gastroenterology Associates (Greenway)
- Georgia Partnership for Telehealth (Azalea)

National Exchange

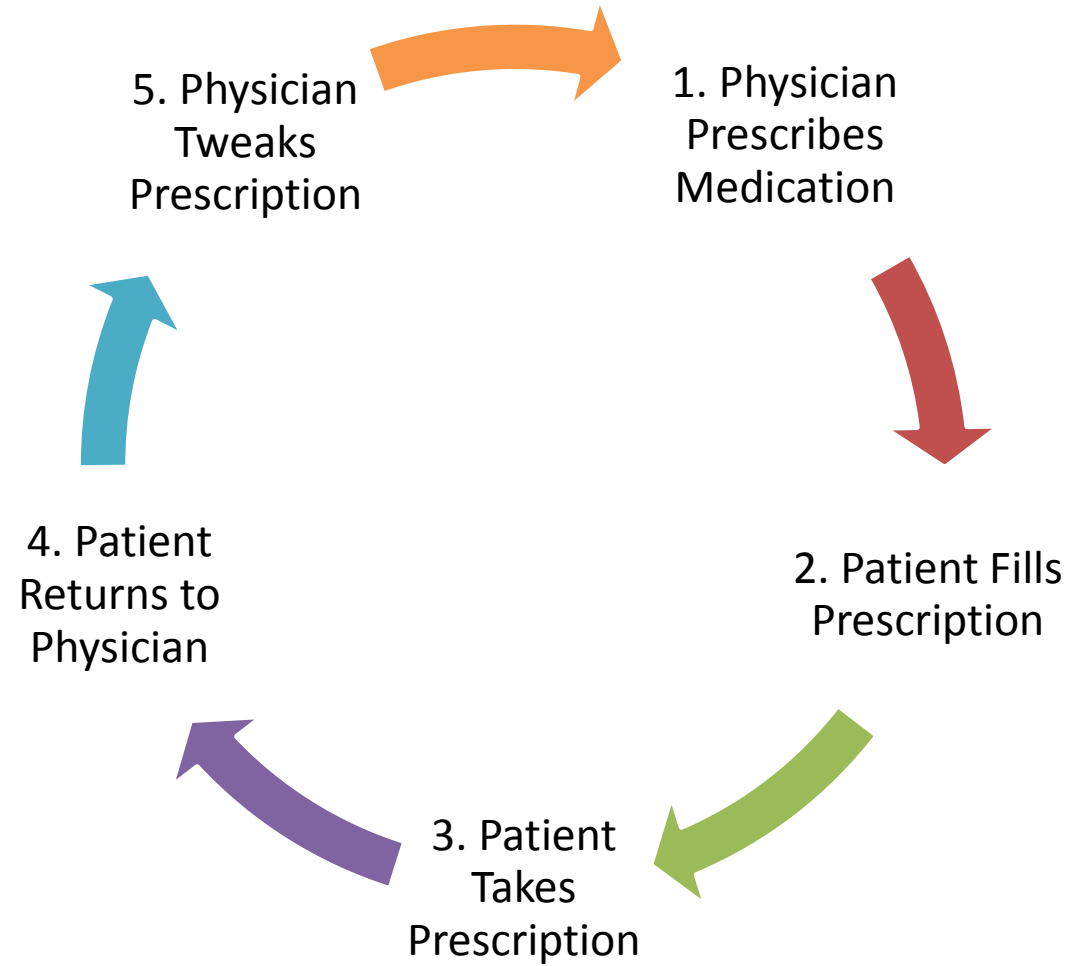
- Veterans Health Administration
- Department of Defense
- DaVita Healthcare Partners
- Alabama (AOHR)
- East Tennessee HIE (etHIN)
- South Carolina HIE (SCHIEEx)
- North Carolina HIE (NCHIEA)





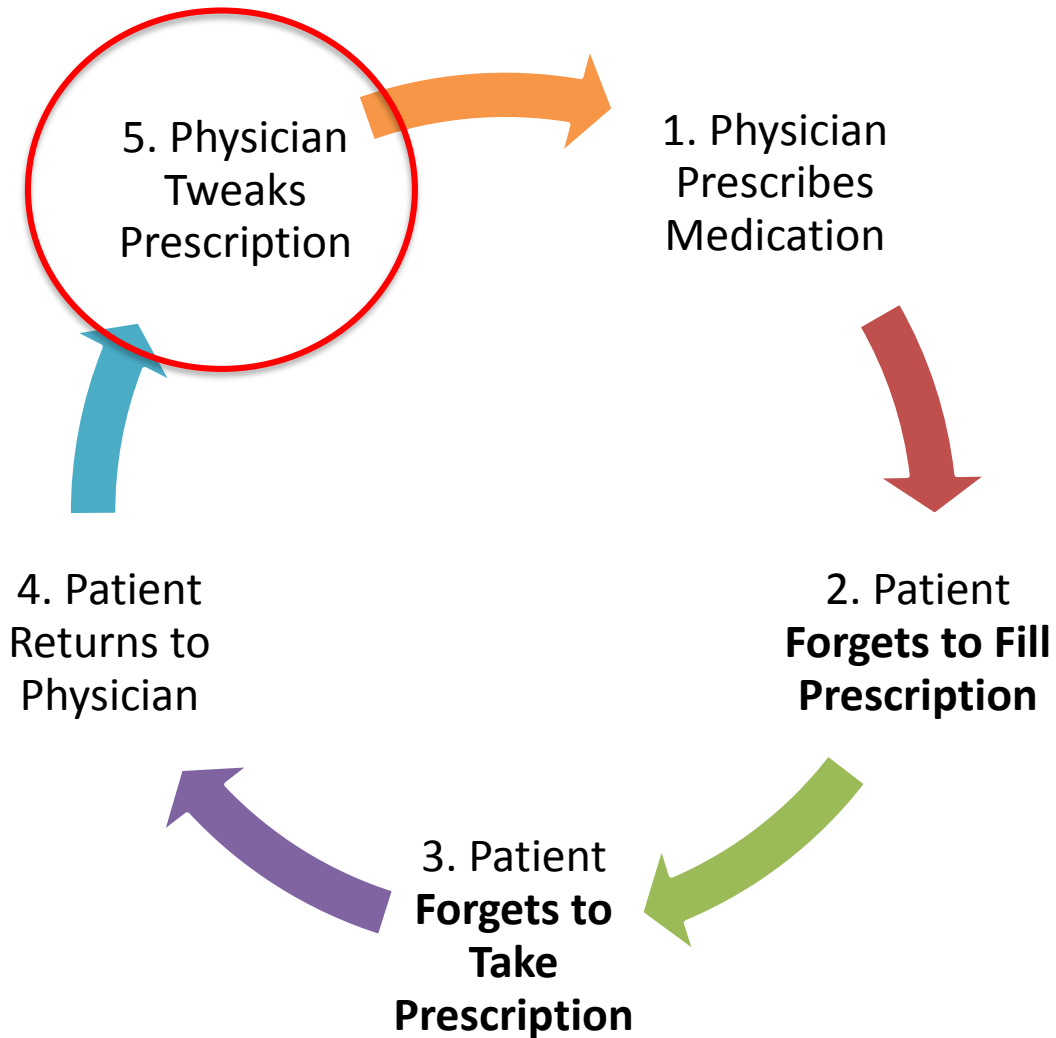
The Role of Medication Fill Data in Measuring Adherence and Preventing Abuse

Completing the Circle – Ideally....



Completing the Circle – Reality

PROBLEM:
Patient has been
non-adherent and
doesn't tell physician



The Cost of Medication Non-Adherence

145
MILLION



Americans suffer from
CHRONIC DISEASES



About $\frac{2}{3}$ of
Americans with prescriptions
ARE NON-ADHERENT



125,000

PREMATURE DEATHS

in the U.S. each year result
from **NON-ADHERENCE**



\$ 300
BILLION

in avoidable costs to the
U.S. health care system
ANNUALLY



Scope of the Problems

- According to the World Health Organization, medication adherence can have a more direct impact on patient outcomes than the specific treatment itself
- Medication adherence can affect quality and length of life, health outcomes, and overall healthcare costs
- Nonadherence can account for up to 50% of treatment failures, and up to 25% of hospitalizations each year in the U.S.
- Typically, adherence rates of 80% or more are needed for optimal therapeutic efficacy
- It is estimated that adherence to chronic medications is around 50%



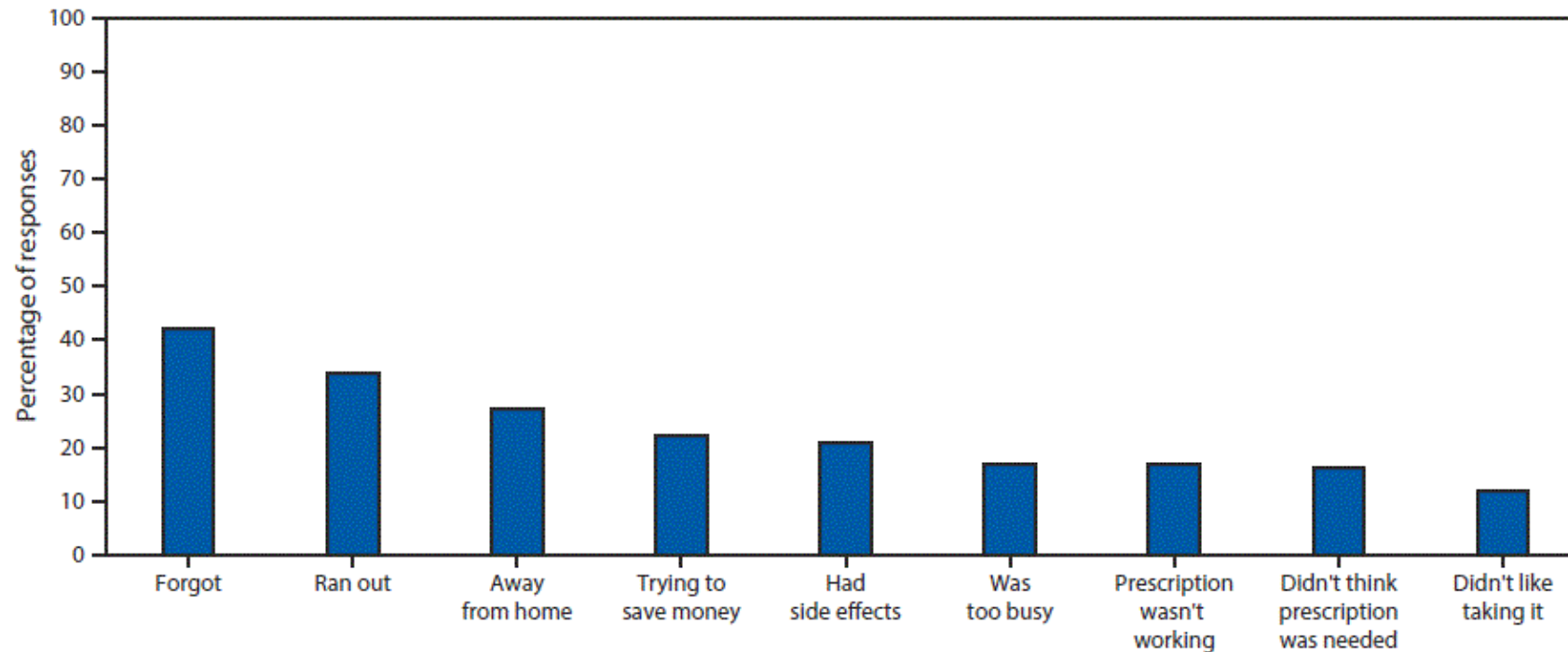
Scope of the Problem



- 3.8 billion prescriptions are written annually in the U.S.
- Approximately one in five new prescriptions are never filled
- Among those filled, approximately 50% are taken incorrectly, particularly with regard to timing, dosage, frequency, and duration



Why? The CDC Reports:

FIGURE. Self-reported reasons* for nonadherence to recommended medication regimens — United States, 2013



Source: Medication Adherence in America: A National Report Card, 2013. Adapted with permission. https://www.ncpanet.org/pdf/reportcard/AdherenceReportCard_Abridged.pdf  .

* Participants could provide more than one response, and as such, categories are not mutually exclusive.



Strategies to Address Non-Adherence – Technology

Successful efforts to improve rates of adherence often incorporate multiple strategies across the continuum of care

- A proven cost-effective strategy to reducing unintentional nonadherence is the use of pillboxes and blister packs to organize medication regimens in clear and simple ways
- Combining the ease of packaging with effective behavioral prompts, such as electronic pill monitors that can remind patients to take their medication and provide messages to healthcare providers when a scheduled drug-dose is missed, supports increased medication adherence

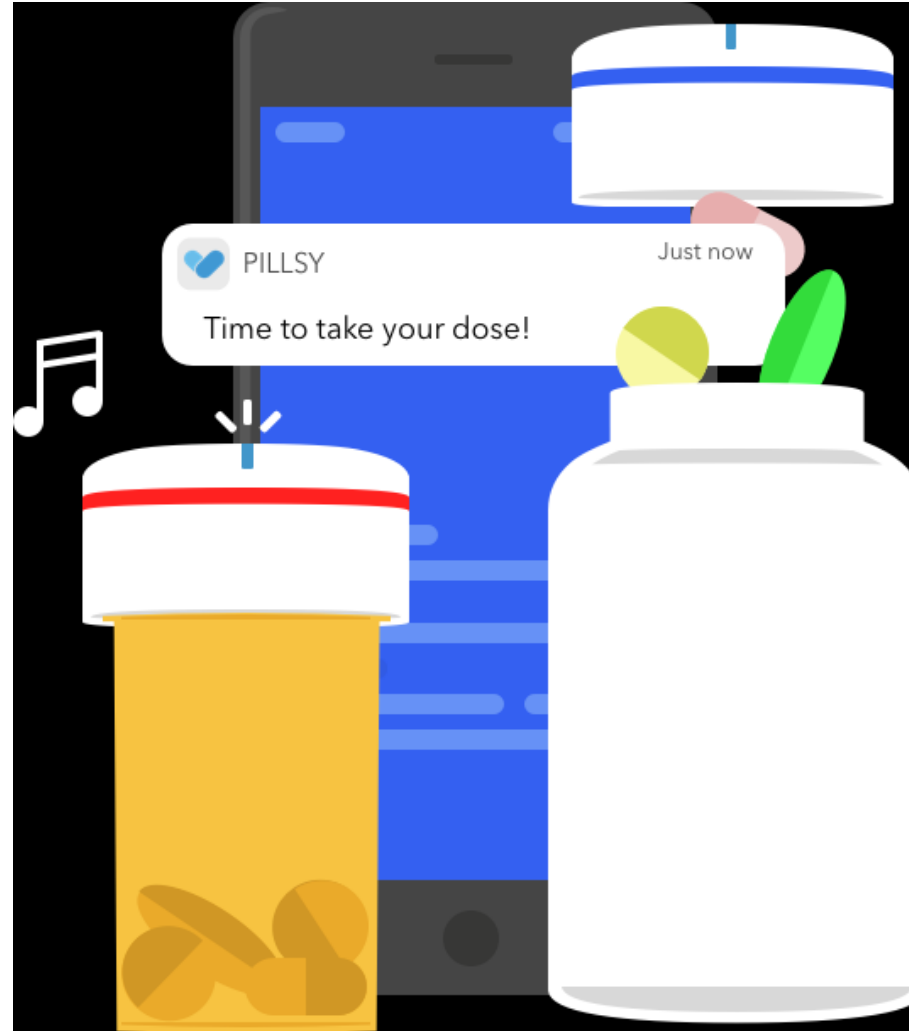


New Technology Trying to Close the Gap



Connected Medication Platform

Enterprise-grade platform for remote patient support and rapid development of connected medication experiences.



New Technology Trying to Close the Gap

+NTENT
SOLUTIONS™

A Smart Mobile Medication Dispenser



Strategies to Address Non-Adherence – Coordinated Care

- Interventions that include team-based or coordinated care have been shown to increase adherence rates
- In a recent study, patients assigned to team-based care were significantly more adherent with their medication regimen 12 months after hospital discharge (89%) compared with patients not receiving team-based care (74%)
 - Collaborative care between pharmacist and primary care provider or cardiologist
 - Two types of voice messaging (educational and medication refill reminder calls)
- Patients reported that team-based care improved their comfort in asking clarifying questions, raising concerns about their medication regimen, and collaborating in developing their treatment plan



Strategies to Address Non-Adherence

- Lowering economic barriers to prescribed medications also improves adherence rates
- System-based strategies that address health disparities can improve clinical goals or reduce disease burden
- Advances in health information technology can also improve medication adherence
 - In a 2011 study, providers using electronic prescribing (e-prescribing) increased first-fill medication adherence by 10% compared with those using paper prescriptions (18)
 - Some e-prescribing software can monitor prescriptions dispensed or unfilled in near real-time, as well as send patients prompts when a new or refill prescription is available



Strategies to Address Non-Adherence – Health IT

- Health information technology can also be used to show real-time impact of medication use on chronic conditions
- Reliant Medical Group, a multispecialty group practice in Massachusetts, provided home blood pressure monitors to 200 of its patients
 - Patients uploaded blood pressure readings into their electronic health record
 - At office visits, providers were able to display trends of patients' blood pressure, discuss barriers if blood pressure was not controlled and patients were not adherent, or add alternative drugs or lifestyle changes if pharmacy data indicated patients were adherent but their blood pressure was still poorly controlled
 - HIT systems enabled providers to view medication coverage by insurer and choose lower cost medications
- Using these and other strategies, Reliant improved its hypertension control rate from 68% in 2011 to 79% in 2014 and was recognized as a Million Hearts Hypertension Control Champion in 2015



Reliant Medical Group Strategies

- **Ensure that patient understands the benefits**
 - Educate about harms of uncontrolled hypertension and benefits of controlling hypertension
 - Make culturally appropriate education materials available
 - Automatically print educational information in the After-Visit Summary if patient has diagnosis of hypertension
 - Show patients graphs of their blood pressure trends during office visits and online electronic health record (EHR) portal. Use graphs to demonstrate challenges and successes with treatment regimens
- **Choose lower cost medications**
 - Use step-therapy protocols that are developed by a multidisciplinary team and are standardized across the organization
 - Control access to pharmaceutical marketing
 - Make the patient's payer-specific formulary available in the EHR to inform medication selection
 - Use generic medication substitution
 - Provide assistance in paying for medications (e.g., RxAssist.org)
 - Consult social workers to assist with adherence barriers



Reliant Medical Group Strategies

- **Minimize medication complexity**
 - Choose once-a-day and combination medications
 - Engage in dialogue about costs versus convenience (e.g., pill-splitting can reduce cost but increase inconvenience)
- **Monitor side effects**
 - Be creative in addressing concerns
 - e.g., if concerned about swollen feet, use a diuretic, if appropriate
 - e.g., if concerned about medication causing abnormal potassium level, use a combined angiotensin-converting enzyme (ACE) inhibitor and a diuretic to normalize potassium
 - When to monitor side effects
 - At visits
 - At prescription renewals, using a standard documentation template
 - After hospital discharge: automated alerts for new medications
 - Consult pharmacists
 - For complex medication regimens or side effects
 - After hospital discharge regarding patients who are on high-risk medications



Reliant Medical Group Strategies

- **Show effectiveness of the medications in lowering blood pressure**
 - Empower patient to record blood pressure readings at home
 - Provide booklets to record readings
 - For patients with financial hardships, provide free home blood pressure monitors
 - Offer free blood pressure clinics
 - Automatically upload blood pressure readings into the EHR
- **Monitor medication adherence**
 - Encourage patients to document their medication-taking behavior
 - Use EHR systems that can show medication fill history
 - Automate adherence monitoring using payer medication claims
 - Review adherence information during visits. Patients' knowing that a clinician is monitoring adherence is at least as important as a patient seeing the results



How GaHIN Is Tackling Medication Fill

Our goal:

- Provide access for GaHIN members to query and retrieve a patient's medication fill history
- Goal is to include the state's Prescription Drug Monitoring Program (PDMP) data
- Current state statute requires providers to check PDMP prior to prescribing certain controlled substances



Prescribed Medications in CCD

Continuity of Care Document

Created On: August 28, 2015

Patient:	HENRY DEMOSKI , 225 BAKER ST ATLANTA, GA, 30313 4045554000	Patient ID: 0000430229
Birthdate:	August 1, 1981	Sex: Male
Race:		Ethnicity:
Preferred Language:	Information not available	
Care Team Member(s):		
Guardian:		Next of Kin:
Other Caregiver(s):		Emergency Contact:

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Value-Added Services Project: Medication Management

Exploring opportunities to establish an ongoing service offering

- Reviewed several vendors
- Narrowed vendors down to DrFirst
- Currently mapping the technology solution between DrFirst and GaHIN
- This will drive contract finalization and total cost of the future service



Preventing Medication Abuse

- Every day, more than **130 people** in the United States die after overdosing on opioids
- The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is \$78.5 billion a year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement
- Roughly 21-29% of patients prescribed opioids for chronic pain misuse them
- Between 8% and 12% develop an opioid use disorder
- An estimated 4-6% who misuse prescription opioids transition to heroin
- About 80% of people who use heroin first misused prescription opioids



PDMP in Georgia

- The Georgia Prescription Drug Monitoring Program (PDMP) is an electronic database used to monitor the prescribing and dispensing of controlled substances
- The PDMP can help eliminate duplicative prescribing and overprescribing of controlled substances and provide a prescriber or pharmacist with critical information regarding a patient's controlled substance prescription history and protect patients at risk of abuse
- Administered by the Department of Public Health



Registering in the Georgia PDMP

- Beginning **July 1, 2018**, you are **required** to check the PDMP before prescribing some Schedule II drugs or benzodiazepines
- Individuals with a DEA number must register in the PDMP including: physicians, physician assistants, pharmacists, licensed pharmacist delegates, dentists, optometrists, podiatrists, nurses with prescriptive authority, medical residents and interns with prescriptive authority.
- The URL for registration is <https://georgia.pmpaware.net/login>



QUESTIONS??



Georgia Health Information Network

**Please participate in the brief survey
following this webinar.**



Future Webinars

How Interoperability Helps Hospitals Improve Patient Care and Care Coordination Across the Continuum of Care

Wednesday, August 28, 2019, 11 a.m. – 12 p.m.

<https://dch.georgia.gov/webinars>

